



[7590-01-P]

## NUCLEAR REGULATORY COMMISSION

[NRC-2013-0103]

### Compensatory and Alternative Regulatory Measures for Nuclear Power Plant Fire Protection (CARMEN-FIRE)

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of availability; request for public comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) requests public comment on the proposed draft NUREG/CR-7135, “Compensatory and Alternative Regulatory Measures for Nuclear Power Plant Fire Protection (CARMEN-FIRE), Draft Report for Comment.”

**DATES:** Comments on this document should be submitted by August 30, 2013. Comments received after this date will be considered if it is practical to do so, but the NRC staff is able to ensure consideration only for comments received on or before this date. To ensure efficient and complete comment resolution, comments should include section, page, and line numbers of the document to which the comment applies, if possible.

**ADDRESSES:** You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- **Federal Rulemaking Web site:**

Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0103**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** Cindy Bladey,  
Chief, Rules, Announcements, and Directives Branch (RADB), Office of  
Administration, Mail Stop: 3WFN 06-A44, U.S. Nuclear Regulatory Commission, Washington,  
DC 20555-0001.

For additional direction on accessing information and submitting comments, see “Accessing Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION, CONTACT:** Felix Gonzalez, Fire Research Branch, Division of Risk Analysis, Office of Nuclear Regulatory Research, telephone 301-251-7596, e-mail: [Felix.Gonzalez@nrc.gov](mailto:Felix.Gonzalez@nrc.gov).

## SUPPLEMENTARY INFORMATION:

### I. Accessing Information and Submitting Comments

#### A. Accessing Information

Please refer to Docket ID NRC-2013-0103 when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and is publicly available, by any of the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID <NRC-2013-0103>.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). Draft NUREG/CR-7135 is available in ADAMS under Accession No. ML13191A864.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

#### B. Submitting Comments

Please include Docket ID <NRC-2013-0103> in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment

submissions at <http://www.regulations.gov> as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

## II. Background

Employing appropriate compensatory measures, on a short-term basis, is an integral part of NRC-approved fire protection programs. However, compensatory measures are not expected to be in place for an extended period of time. The NRC staff expects that the corrective action(s) will be completed, and reliance on the compensatory measure eliminated, at the first available opportunity, typically the first refueling outage. Thus, a compensatory measure that is in place beyond the next refueling outage (typically 18 – 24 months) is considered to be a *“long-term compensatory measure.”*

This report is intended to serve as a reference guide for agency staff responsible for evaluating the acceptability of alternative interim compensatory measures provided to offset the degradation in fire safety caused by impaired fire protection features at nuclear power plants. The report documents the history of compensatory measures and details the regulatory framework established by NRC to ensure they are appropriately implemented and maintained. This report also explores technologies that did not exist when the current plants were licensed

such as video-based detection, temporary penetration seals and portable suppression systems which under certain conditions may provide an effective alternative to traditional measures specified in a plant's approved fire protection program.

The NRC is seeking public comment in order to receive feedback from the widest range of interested parties and to ensure that all information relevant to the information contained within this document is correct and accurate. We are specifically interested in receiving feedback on the following questions:

1. Do licensees differentiate between compensatory measures related to impaired structures, systems, and components (SSC) used for Reactor Post-Fire Safe-Shutdown Protection vs. impaired classical Fire Protection (FP) systems? If so, please provide information on the differences between the two.
2. Are there any other examples of Alternative Compensatory Measures (e.g. other new technology) not already discussed in the NUREG/CR that should be considered? If so, please provide information on these alternative compensatory measures.
3. Are there any issues, concerns or better suggestions regarding the examples or technologies discussed in the NUREG/CR? If so, please provide your suggestions.

This document is issued for comment only and is not intended for interim use. The NRC will review public comments received on the documents, incorporate suggested changes as necessary, and make the final NUREG-report available to the public.

Dated at Rockville, Maryland, this 16th day of July 2013.

For the Nuclear Regulatory Commission.

Mark Henry Salley, Chief,  
Fire Research Branch,  
Division of Risk Analysis,  
Office of Nuclear Regulatory Research.

